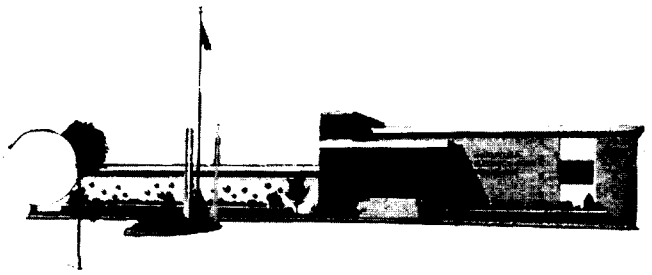
JAL (3420)



MARSHFIELD ELECTRIC and WATER DEPT.

2000 South Roddis Ave • P.O. Box 670
MARSHFIELD, WISCONSIN 54449-0670
Phone 715 387-1195 • FAX 715 389-2016
http://www.mewd.com

January 21, 2002

Mr. Jim Loock, Chief Electric Engineer
Public Service Commission
610 N. Whitney Way
P.O. Box 7854
Madison, WI 53707-7854

RE: In the Matter of Filing Reporting Requirements for Appropriate Inspection and Maintenance, PSC Rule 113.0607(6)

Dear Mr. Loock:

Enclosed for filing are 3 copies of Marshfield Electric and Water Department's annual report to the commission. This report details the inspections completed along with the system summary. This report is being filed in compliance with the requirements of PSC 113.0607(6) for the Preventative Maintenance Plan.

Very truly yours,

Joseph C Pacovsky
Utility Manager

Enclosures

ANNUAL REPORT DOCUMENTING COMPLIANCE WITH THE PREVENTATIVE MAINTENANCE PLAN

Marshfield Electric and Water Department

FILING DEADLINE
FEBRUARY 1, 2003

January 21, 2002

Robert J. Trussoni
2000 S Roddis Ave
Marshfield, WI 54449
(715) 387-1195
Trussoni@tznet.com

This report format was prepared by the MEUW work group for PSC Rule 113.0607 for use by the 82 municipal electric utilities in Wisconsin and endorsed by PSC staff as meeting the requirements of Rule PSC 113.0607.

I Reporting Requirements: PSC 113.0607(6) states;

Each utility shall provide a periodic report to the commission showing compliance with its Preventative Maintenance Plan. The report shall include a list of inspected circuits and facilities, the condition of facilities according to established rating criteria, schedules established and success at meeting the established schedules.

II Inspection Schedule and Methods:

SCHEDULE:	MONTHLY	ANNUAL	EVERY 5 YEARS
Transmission (69Kv)		X	X
Substations	X	X	
Distribution (OH & UG)			X

METHODS: Five criteria groups will be used to complete the inspection of all facilities.

1. IR – infrared thermography used to find poor electrical connections and/or oil flow problems in equipment.
2. RFI - Radio Frequency Interference, a byproduct of loose hardware and connections, is checked using an AM radio receiver.
3. SI – structural integrity of all supporting hardware including poles, crossarms, insulators, structures, bases, foundations, buildings, etc.
4. Clearance – refers to proper spacing of conductors from other objects, trees and conductors.
5. EC – equipment condition on non-structural components such as circuit breakers, transformers, regulators, reclosers, relays, batteries, capacitors, etc.

Distribution facilities will be inspected by substation circuits on a 5 year cycle such that the entire system will be inspected every 5 years. Inspector instructions for inspecting all facilities and forms are included in the plan.

We inspect our substation monthly with a more detailed annual inspection. We also conduct a weekly less detailed inspection on our transmission lines. We do a walking inspection two times per year and they are flown three times per year.

III Condition Rating Criteria

This criterion, as listed below, establishes the condition of a facility and also determines the repair schedule to correct deficiencies.

0) Good condition
1) Good condition but aging
2) Non-critical maintenance required – normally repair within 12 months
3) Priority maintenance required – normally repair within 90 days
4) Urgent maintenance required – report immediately to the utility and repair normally within 1 week

IV Corrective Action Schedule

The rating criteria as listed above determine the corrective action schedule.

V Record Keeping

All inspection forms and records will be retained for a minimum of 10 years. The inspection form contains all of the required critical information i.e. inspection dates, condition rating, schedule for repair and date of repair completion.

VI Reporting Requirements

A report and summary of this plan's progress will be submitted at least every two years with the first report due to the Commission by February 1, 2003. The report will consist of a cover letter documenting the percent of inspections achieved compared to the schedule and the percent of maintenance achieved within the scheduled time allowance.

VII Inspected Circuits and Facilities

Circuit # and description	Substation
Ckt 631 Business, Hewitt & Rural SE	Hume
Ckt 632 Marshfield Door	Hume
Ckt 633 Business, Hewitt & Rural NE	Hume

Base load and peaking generation, less than 50 megawatts per unit in size, is typically subject to pre-operational checks, in addition to checks and maintenance during and after periods of operation. Emergency generation is test run and maintained every *(type in a period of time not exceeding one month)*to confirm its operational readiness.

VIII Scheduling Goals Established and Success of Meeting the Criteria:

It was this utility's goal to complete all monthly substation inspections, annual transmission line inspections and to inspect 20% of the distribution system. In addition, we expected to complete all scheduled maintenance resulting from the inspections within the prescribed time periods specified in the rating criteria.

Most of the inspection goals were met. 20% of the distribution circuits were inspected. No urgent or priority maintenance items were found. 370 non-critical maintenance items were found. The majority of these were ground molding and guy guards. 89% of the maintenance required has been completed according to the plan schedule.

IX Facility condition – rating criteria:

Our overall system is in normal operating condition. Our substations are recently rebuilt for the most part. Our transmission line to Arpin is relatively new and in good condition. The line to Stratford is scheduled for reconducting or rebuilding in the next few years. It is in good shape for its age. The distribution system has been well maintained and we have had a progressive rebuild schedule. Overall, its condition ranges from in need of replacement to new. We have been utilizing contract crews to ensure that our construction projects have not fallen behind because of unusually heavy demands of our crew's time.